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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/986,435

11/08/2001

Kazushi Sato

SON-2267

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23353

7590

06/07/2004

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EXAMINER

VO, TUNG T

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,435

Applicant(s)

SATO ET AL.

Examiner

Tung T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 4-15 and 19-30 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 01/08/02 has been considered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh et al. (US 6,658,157 B1) in view of Panusopone et al. (US 6,47,061).

Re claims 1-3 and 16-18, Satoh teaches an image information conversion apparatus (fig. 32) comprising: conversion means (fig. 32, element 27) for converting first image compression information inputted to said image information conversion apparatus into second image compression information to be outputted from said image information conversion apparatus; each of the first image compression information and the second image compression information including at least intra-image coded pictures and inter-image predictive coded pictures (col. 3 and 4);

and scene change detection means (scene change detection) operable when said conversion means calculates, based on a variable representative of a complexity of a screen for

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each frame of the inputted first image compression information, a target code amount for each frame of the second image compression information to be outputted for detecting, whether or not a scene change is included in a frame of the intra-image coded picture to be converted (col. 12); said scene change detection means uses the product of a code amount allocated to each frame and an average quantization scale of the first image compression information as the variable representative of the complexity of the screen for the frame to detect whether or not a scene change is included in the frame (col. 13, equation 4).

It is noted that Satoh does not particularly teach a conversion of an intra-image coded picture of the first image compression information into an inter-image predictive coded picture of the second image compression information as specified in claims 1-2 and 16-17.

However, Panusopone teaches an apparatus for converting the first compressed image information into the second compressed image information (MPEG-2 converted to MPEG-4) having a conversion of an intra-image coded picture of the first image compression information into an inter-image predictive coded picture of the second image compression information (col. 19, lines 1-7). Therefore, taking the teachings of Satoh and Panusopone as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Panusopone into the converting apparatus of Satoh for the purpose of converting the intra coded picture into the inter coded picture. Doing so would result in improves the image quality as suggested by Panusopone (col. 18).

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Allowable Subject Matter

5. Claims 4-15 and 19-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoo et al. (US 2002/0110193) discloses a transcoding method and apparatus therefor.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TUNG T. VO
PATENT EXAMINER

Tung T. Vo
Examiner
Art Unit 2613

T.Vo